CLAIMS

We claim:

1. A method of selecting a wireless network from a plurality of wireless networks available to a wireless device, the method comprising:

determining a requested service associated with the wireless device;

determining whether one of the plurality of wireless networks can provide the requested service; and

if one of the plurality of wireless networks can provide the requested service, choosing the one wireless network of the plurality of wireless networks.

2. The method of selecting a network according to claim 1, wherein choosing the one wireless network of the plurality of wireless networks further comprises choosing at least one network based at least in part on quality of service.

3. The method of selecting a network according to claim 1, wherein choosing the one wireless network of the plurality of wireless networks further comprises choosing the one wireless network based at least in part on cost of service.

4. The method of selecting a network according to claim 1, wherein choosing the one wireless network of the plurality of wireless networks further comprises choosing the one wireless network based at least in part on preferred provider agreements.

5. The method of selecting a network according to claim 1, wherein choosing the one wireless network of the plurality of wireless networks further comprises choosing the one wireless network based at least in part on network capacity.

6. The method of selecting a network according to claim 1, wherein choosing the one wireless network of the plurality of wireless networks further comprises choosing the one wireless network based at least in part on a network load associated with a wireless network presently serving the wireless device.

7. The method of selecting a network according to claim 6, wherein choosing the one wireless network of the plurality of wireless networks further comprises choosing the one wireless network based further on a wireless network load of other wireless networks of the plurality of wireless networks.

8. The method of selecting a network according to claim 1, wherein choosing the one wireless network of the plurality of wireless networks is based at least in part on a table of information that has been downloaded to the wireless device.

9. The method of selecting a network according to claim 8, wherein the table is downloaded on a periodic basis.

10. The method of selecting a network according to claim 9, wherein the table is downloaded on a periodic basis according to updated roaming agreements.

11. The method of selecting a network according to claim 9, wherein the table is downloaded on a periodic basis according to when the wireless device is on.

12. The method of selecting a network according to claim 1, wherein the wireless device is roaming outside a home service area.

13. The method of selecting a network according to claim 1, wherein the wireless device is operating inside a home service area.

14. The method of selecting a network according to claim 12 or 13, further comprising periodically downloading a table to the wireless device.

15. A method of selecting a wireless platform from a plurality of wireless platforms offered by a service provider for a wireless device, the method comprising:

receiving a request for service associated with the wireless device;

determining whether one of the plurality of wireless platforms can provide the requested service; and

if one of the plurality of wireless platforms can provide the requested service, choosing the one wireless platform of the plurality of wireless platforms.

16. The method of selecting a wireless platform of claim 15, further comprising downloading a table including the plurality of wireless platforms for use in determining whether one of the plurality of wireless platforms can provide the requested service.

17. The method of selecting a wireless platform of claim 16, wherein the wireless device is operating in a home service area and the plurality of platforms are offered by a home service provider.

18. The method of selecting a wireless platform of claim 17, wherein the wireless device is operating outside a home service area and the plurality of platforms are offered by a roaming service provider.

19. A system for providing network selection comprising:

a wireless device;

at least one base station;

a radio network interface communicating with the at least one base station for servicing the wireless device;

a home location register associated with the radio network interface;

a switched network communicating with a data network for communicating signals to and from the wireless device;

a home service provider communicating with the at least one base station to periodically download a table to the wireless device,

wherein the wireless device uses the table to choose a network based at least in part on a service request from the wireless device and the availability of networks listed in the table to optimally process the service request.

20. The system for providing network selection of claim 19, wherein the wireless device chooses the network based at least in part of the quality of service available from the networks listed in the table according to the service requested by the wireless device.

21. The system for providing network selection of claim 19, wherein the wireless device chooses the network based at least in part of the cost of service available from the networks listed in the table according to the service requested by the wireless device.

22. The system for providing network selection of claim 19, wherein the wireless device chooses the network based at least in part of a network load of the networks listed in the table and the network servicing the wireless device and the choice of network is associated with the service requested by the wireless device.

23. The system for providing network selection of claim 19, wherein the wireless device chooses the network based at least in part of a latency associated with the networks listed in the table according to the service requested by the wireless device.

24. A system for providing network selection for a wireless device, the system using at least one base station, a radio network interface, a home location register, and a switched network communicating with a data network and a packet switched network for communicating signals to and from the wireless device, the system comprising:

a operation unit within the wireless device;

a home service provider communicating with the at least one base station to periodically download a table to the wireless device,

wherein the wireless device operation unit uses the table to choose a network based at least in part on a service request from the wireless device and the availability of networks listed in the table to optimally process the service request.

25. The system for providing network selection of claim 24, wherein the wireless device chooses the network based at least in part of the quality of service available from the networks listed in the table according to the service requested by the wireless device.

26. The system for providing network selection of claim 24, wherein the wireless device chooses the network based at least in part of the cost of service available from the networks listed in the table according to the service requested by the wireless device.

27. The system for providing network selection of claim 24, wherein the wireless device chooses the network based at least in part of a network load of the networks listed

in the table and the network servicing the wireless device and associated with the service requested by the wireless device.

28. The system for providing network selection of claim 24, wherein the wireless device chooses the network based at least in part of a latency associated with the networks listed in the table according to the service requested by the wireless device.

29. A system for providing platform selection for a wireless device, the system using at least one base station, a network interface to base station, a home location register, and a publicly switched network communicating with a data network and a packet switched public network for communicating signals to and from the wireless device, the system comprising:

a operation unit within the wireless device;

a home service provider communicating with the at least one base station to periodically download a table to the wireless device,

wherein the wireless device operation unit uses the table to choose a platform based at least in part on a service request from the wireless device and the availability of platforms listed in the table to optimally process the service request.

30. The system for providing platform selection of claim 29, wherein the wireless device chooses the platform based at least in part of the quality of service available from the platforms listed in the table according to the service requested by the wireless device.

31. The system for providing platform selection of claim 29, wherein the wireless device chooses the platform based at least in part of the cost of service available from the platforms listed in the table according to the service requested by the wireless device.

32. The system for providing platform selection of claim 29, wherein the wireless device chooses the platform based at least in part of a network load of the platforms listed in the table and the network servicing the wireless device and associated with the service requested by the wireless device.

33. The system for providing platform selection of claim 29, wherein the wireless device chooses the platform based at least in part of a latency associated with the platforms listed in the table according to the service requested by the wireless device.

34. The system for providing platform selection according to claim 29, wherein the platforms listed on the table are offered by a home service provider.

35. The system for providing platform selection according to claim 29, wherein the platforms listed on the table are offered by a roaming service provider.

36. A method of selecting a wireless network from a plurality of wireless networks to service a wireless device, the method comprising:

establishing a connection between the wireless device and a home network; and

directing, from the home network, the selection of a wireless network of the plurality of wireless networks based at least in part on a requested service associated with the wireless device.

37. The method of selecting a wireless network according to claim 36, wherein directing the selection of the wireless network of the plurality of wireless networks

further comprises choosing at least one wireless network of the plurality of networks based at least in part on quality of service.

38. The method of selecting a wireless network according to claim 36, wherein directing the selection of the wireless network of the plurality of wireless networks further comprises choosing the wireless network of the plurality of networks based at least in part on cost of service.

39. The method of selecting a wireless network according to claim 36, wherein directing the selection of the wireless network of the plurality of wireless networks further comprises choosing at least one wireless network of the plurality of networks based at least in part on preferred provider agreements.

40. The method of selecting a wireless network according to claim 36, wherein the quality of service relates to a threshold level of toleration for delay in data transmission.

41. The method of selecting a wireless network according to claim 37, wherein the quality of service relates to a minimum data rate.

42. The method of selecting a wireless network according to claim 37, wherein the quality of service is associated with a network load of a wireless network currently servicing the wireless device.

43. The method of selecting a wireless network according to claim 42, wherein the quality of service is further associated with a network load of wireless networks of the plurality of wireless networks with which the wireless device may register.

44. The method of selecting a wireless network according to claim 36, wherein the wireless device is operating outside a home service area.

45. The method of selecting a wireless network according to claim 36, wherein the wireless device is operating within a home service area.

46. A method of selecting a wireless network from a plurality of wireless networks associated with a wireless device, the method comprising:

initiating a service request associated with the wireless device;

determining whether a current wireless network serving the wireless device can support the service request according to a predetermined parameter;

if the current wireless network does not support the service request within the predetermined parameter, choosing a wireless network from the plurality of wireless networks, the chosen wireless network supporting the service request within the predetermined parameter.

47. The method of selecting a wireless network of claim 46, wherein the chosen wireless network has the strongest signal of the plurality of wireless networks capable of supporting the service request.

48. The method of selecting a wireless device of claim 46, wherein the plurality of wireless networks are associated with the wireless device in its home service area.

49. The method of selecting a wireless device of claim 46, wherein the plurality of wireless networks are associated with the wireless device while roaming.

50. A method of selecting a wireless platform from a plurality of wireless platforms offered by a service provider currently serving a wireless device, the method comprising:

initiating a service request associated with the wireless device;

determining whether a current wireless platform serving the wireless device can support the service request according to a predetermined parameter; and

if the current wireless platform does not support the service request within the predetermined parameter, choosing a wireless platform from the plurality of wireless platforms, the chosen wireless platform supporting the service request within the predetermined parameter.

51. The method of selecting a wireless platform from a plurality of wireless platforms of claim 50, wherein the service provider is a roaming service provider.

52. The method of selecting a wireless platform from a plurality of wireless platforms of claim 50, wherein the service provider is a home service provider.

53. The method of claim 50, wherein the predetermined parameter is associated with a quality of service.

54. The method of claim 50, wherein the predetermined parameter is associated with a platform traffic load.

55. The method of claim 50, wherein the predetermined parameter is associated with a latency period of delivering the requested service.

56. The method of claim 50, wherein the predetermined parameter is associated with a cost of processing the requested service.

57. A method of selecting between a wireless platform and wireless network for servicing a wireless device, the method comprising:

initiating a service request associated with the wireless device;

determining whether a current wireless platform serving the wireless device can support the service request according to a predetermined parameter;

if the current wireless platform does not support the service request within the predetermined parameter, searching for a new wireless platform from a plurality of wireless platforms offered by a current service provider;

if a new wireless platform is available from the plurality of wireless platforms offered by the current service provider that will support the service request within the predetermined parameter, switching the wireless device to the new wireless platform;

if no new wireless platform from the plurality of wireless platforms offered by the current service provider can service the service request within the predetermined parameter, searching for a new wireless network; and

if a new wireless network can service the service request within the predetermined parameter, registering the wireless device with the new wireless network.

58. The method of selecting a wireless platform from a plurality of wireless platforms of claim 57, wherein the current service provider is a roaming service provider.

59. The method of selecting a wireless platform from a plurality of wireless platforms of claim 57, wherein the current service provider is a home service provider.

60. The method of claim 57, wherein the predetermined parameter is associated with a quality of service.

61. The method of claim 57, wherein the predetermined parameter is associated with a platform traffic load.

62. The method of claim 57, wherein the predetermined parameter is associated with a latency period of delivering the requested service.

63. The method of claim 57, wherein the predetermined parameter is associated with a cost of processing the requested service.

64. A method of selecting a wireless network from a plurality of wireless networks associated with a wireless device, the method comprising:

initiating a service request associated with the wireless device;

determining whether a current wireless network serving the wireless device is operating at or above a predetermined network load threshold;

if the current wireless network is operating above the network load threshold, selecting an alternate wireless network from the plurality of wireless networks for servicing the service request.

65. The method of selecting a wireless network of claim 64, wherein selecting an alternate wireless network from the plurality of wireless networks depends in part on a network load capacity of the alternate network.

66. The method of selecting a wireless network of claim 65, wherein after selecting an alternate wireless network from the plurality of wireless networks, the method further comprises:

delivering the requested service to the wireless device through the selected alternate wireless network.

67. The method of selecting a wireless network of claim 64, wherein the wireless device is in a home service area.

68. The method of claim 64, wherein the wireless device is roaming.

69. A method of selecting a wireless network from a plurality of wireless networks, the method comprising:

establishing a connection between a wireless device and a home network; and

directing an application associated with the wireless device to a wireless network of the plurality of wireless networks based at least in part on a transmission delay associated with the application.

70. The method of selecting a wireless network from a plurality of wireless networks of claim 69, wherein establishing a connection between the wireless device and the home network further comprises establishing a low bandwidth connection.

71. A method of selecting a wireless network from a plurality of wireless networks when a wireless device is roaming, the method comprising:

selecting the wireless network from the plurality of networks based at least in part on roaming agreements; and

registering the wireless device with the wireless network selected.

72. A method of selecting a wireless network from a plurality of wireless networks of claim 71, further comprising:

selecting the wireless network based at least in part on services offered by the wireless network.

73. A system for selecting a wireless network from a plurality of wireless networks for servicing a wireless device, the system comprising:

a network node communicating with the wireless device, the network node communicating with each wireless network of the plurality of wireless networks, wherein the network node directs the wireless device to select the wireless network for servicing the wireless device from the plurality of wireless networks based at least in part on the quality of service required by the wireless device.

74. The system for selecting a wireless network of claim 73, wherein the network node directs the wireless device to select the wireless network by periodically communicating a roaming table to the wireless device.

75. The system for selecting a wireless network of claim 74, wherein the roaming table comprises preferred wireless networks of the plurality of wireless networks according to the capability of each wireless network of the plurality of wireless networks.

76. The system for selecting a wireless network of claim 75, wherein the roaming table further comprises preferred wireless networks of the plurality of wireless networks

according to a quality of service capability of each wireless network of the plurality of wireless networks.

77. A system for selecting a wireless network from a plurality of wireless networks, the plurality of wireless networks including a home network, the system comprising:

a wireless device establishing a communication link with the home network, wherein the home network monitors applications associated with the wireless device and services available from the plurality of wireless networks and wherein the home network directs the applications to register with wireless networks of the plurality of wireless networks based on a predefined parameter.

78. The system of claim 77, wherein the predefined parameter is associated with a quality of service.

79. The system of claim 77, wherein the predefined parameter is associated with a cost of service.

80. The system of claim 77, wherein the predefined parameter is associated with a business agreement.

81. The system of claim 77, wherein the predefined parameter is associated with latency.

82. The system of claim 77, wherein the predefined parameter is associated with a minimum data rate.

83. The system of claim 77, wherein the predefined parameter is associated with a network coverage area.

84. A method of dynamically selecting a network from a plurality of networks, the method comprising:

establishing a connection between a wireless device and a home network;

directing the wireless device to register with a first network of the plurality of networks; and

if a service request from the wireless device would be better served by a network of the plurality of networks other than the first network, establishing a parallel communication session with a second network of the plurality of networks to process the service request.

85. A method of directing a wireless device to a different network service provider different from a home network service provider when the wireless device is in a home service area, the method comprising:

requesting a service from the wireless device;

determining by the home network service provider whether the different network service provider could provide the service according to predetermined parameters; and

if the predetermined parameters match, directing the wireless device to register with the different network service provider to provide the service.

86. A method of directing a wireless device to a different network service provider different from a home network service provider when the wireless device is in a home service area, the method comprising:

requesting a service from the wireless device;

determining by reference to a table whether the different network service provider could provide the service according to at least one predetermined parameter; and

if the at least one predetermined parameter matches, directing the wireless device to register with the different network service provider to provide the service.

87. A method of directing a wireless device to a different network service provider from a current service provider servicing the wireless device, the method comprising:

receiving a service request from the wireless device;

submitting a request for an offer for processing the service request to at least one network service provider; and

directing the wireless device to register with a different service provider based at least in part on a resulting offer for processing the service request.

88. A method of directing a wireless device to a different network service provider according to claim 87, wherein submitting a request for an offer for processing further comprises submitting the request to an exchange.

89. A method of directing a wireless device to a different network service provider according to claim 87, wherein directing the wireless device to register with a different service provider is based at least in part on a cost of service associated with submitting the request.

90. A method of directing a wireless device to a different network service provider according to claim 87, wherein directing the wireless device to register with a different

service provider is based at least in part on a quality of service associated with submitting the request.

91. A method of directing a wireless device to a different network service provider according to claim 87, wherein directing the wireless device to register with a different service provider is based at least in part on a network load associated with submitting the request.

92. A method of directing a wireless device to a different network service provider from a current service provider servicing the wireless device, the current service provider receiving a plurality of service requests from other wireless devices, the method comprising:

receiving a service request from the wireless device;

submitting a request for an offer for processing the service request to at least one network service provider, the request being associated with similar currently pending service requests; and

directing the wireless device to register with a different service provider based at least in part on the resulting offer for processing the service request.

93. A method of directing a wireless device to a different network service provider from a current service provider servicing the wireless device, the current service provider receiving a service request from the wireless devices, the method comprising:

receiving a service request from the wireless device;

submitting a request for an offer for processing the service request; and

directing the wireless device to register with a different service provider based at least in part on a subscriber profile associated with the wireless device.

94. The method of directing a wireless device to a different network service provider of claim 93, wherein directing the wireless device to register with a different service provider is further based at least in part on a resulting offer in response to the request.

95. A method of directing a plurality of wireless devices to different network service providers from each respective current service provider servicing each of the plurality of wireless devices, the method comprising:

receiving a service request from each of the plurality of wireless devices;

submitting a request for an offer for processing the service requests to at least one different network service provider, the request being associated with similar currently pending service requests; and

directing the plurality of wireless devices to register with a different service provider based at least in part on the resulting offer for processing the service request.

96. The method of directing a plurality of wireless device to different network service providers of claim 95, wherein directing the plurality of wireless devices to register with a different service provider is further based at least in part on a respective subscriber profile associated with each of the plurality of wireless devices.

97. A method of directing a wireless devices to either a different platform from a currently serving platform or a different service provider from a currently serving service provider, the method comprising:

receiving a service request from the wireless device;

submitting a request for an offer for processing the service request to at least one different service provider; and

directing the wireless device to either reconnect to a different platform or re-register with a different service provider based at least in part on the resulting offer for processing the service request.

98. The method of directing a wireless device to either a different platform or a different network service provider of claim 97, wherein the different platform is part of a portfolio of platforms offered by the currently serving service provider.

99. A method enabling a wireless device to request an offer for processing a service request from a plurality of service providers, the method comprising:

submitting a request for an offer from the wireless device;

evaluating offers from the plurality of service providers;

redirecting a communication link from the wireless device to one of the plurality of service providers based at least in part on the evaluation of the offers.

100. The method of enabling a wireless device to request an offer for processing a service request from a plurality of service providers of claim 99, wherein submitting a request for an offer further comprises the wireless device submitting a request for an offer to a bid server.

101. The method of enabling a wireless device to request an offer for processing a service request from a plurality of service providers of claim 100, wherein the plurality of service providers each submit information regarding offers to the bid server.

102. The method of enabling a wireless device to request an offer for processing a service request from a plurality of service providers of claim 101, wherein after the

wireless device evaluates the offers, the wireless device may accept an offer based at least in part on its evaluation.

103. The method of enabling a wireless device to request an offer for processing a service request from a plurality of service providers of claim 102, further comprising:

after accepting an offer based at least in part of its evaluation, the wireless device further receives an access permit from the bid server associated with the accepted offer.

104. The method of enabling a wireless device to request an offer for processing a service request from a plurality of service providers of claim 103, further comprising:

using the access permit to register with a service provider associated with the accepted offer to process the service request.